



Function in Python

What is Function?

A function is a block of code which only runs when it is called. You can pass data, known as parameters, into a function. A function can return data as a result.

Types Of Function in Python.

- 1)Normal Function
- 2)With Argument
- 3)Default Argument
- 4)Arbitrary Function
- 5) Arbitrary Keyword Arguments Function(kwargs)
- 6)List Function
- 7) Empty function

1)Normal Function:

```
def my_function():  
    print("Hello Python ")
```

2)With Argument:

```
def add(x):  
    return 5*x  
  
print(add(10))
```

3)Default Argument

Default arguments in Python functions are those arguments that take default values if no explicit values are passed to these arguments from the function call.

```
def add(name="Praxware Technologies", mobile="9016395600"):  
    print("Company Name :", name)  
    print("Mobile Number :", mobile)  
  
add()
```

4)Arbitrary Function

Arbitrary Arguments, *args

If you do not know how many arguments that will be passed into your function, add a * before the parameter name in the function definition.

This way the function will receive a tuple of arguments, and can access the items accordingly:

```
def randomargument(*data):
```

```
    print("No is :",data[0])
```

```
    print("Name is :",data[1])
```

```
    print("Address is :",data[2])
```

```
    print("Mobile is :",data[3])
```

```
randomargument(1,"Hitesh","Ahemdabad","9016395600")
```

5)Arbitrary Keyword Arguments Function(kwargs)

**kwargs allows us to pass a variable number of keyword arguments to a Python function. In the function, we use the double-asterisk (**) before the parameter name to denote this type of argument.

```
def doubleargument(**data):  
    print("This is Programming Language Name is :",data["name2"])
```

```
doubleargument(name1="Android",name2="Python")
```

6)List Function

Python list () function takes any inerrable as a parameter and returns a list. In Python inerrable is the object you can iterate over.

```
def listargument(data):  
    print("ID :",data[0])  
    print("Name :",data[1])  
    print("City :",data[2])
```

```
listargument([1,"Hitesh","Ahmedabad"])
```

7)Empty Function

In Python, to write empty functions, we use pass statement. pass is a special statement in Python that does nothing. It only works as a dummy statement.

```
def fun():  
    pass
```